

SEQUENCE LISTING

<110> Yu, Xuanchuan
Turner, C. Alexander Jr.

<120> Novel Human Protease and Polynucleotides Encoding the Same

<130> LEX-0298-USA

<150> US 60/261,684

<151> 2001-01-12

<160> 2

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 5289

<212> DNA

<213> homo sapiens

<400> 1

atggaatgct	gccgtcgggc	aactcctggc	acactgctcc	tctttctggc	tttctgctc	60
ctgagttcca	ggaccgcacg	ctccgaggag	gaccgggacg	gcctatggga	tgcttggggc	120
ccatggagt	aatgctcacg	cacctgcggg	ggtggggcct	cctactctct	gagggcgtgc	180
ctgagcagca	agagctgtga	aggaagaaat	atccgataca	gaacatgcag	taatgtggac	240
tgcccaccag	aagcaggtga	tttccgagct	cagcaatgct	cagctcataa	tgatgtcaag	300
caccatggcc	agttttatga	atggcttcct	gtgtctaata	accctgacaa	cccattgtca	360
ctcaagtgcc	aagccaaagg	aacaaccctg	gttgttgaac	tagcacctaa	ggtcttagat	420
ggtacgcgtt	gctatacaga	atctttggat	atgtgcatca	gtggtttatg	ccaaattggt	480
ggctgcgatc	accagctggg	aagcacctgc	aaggaagata	actgtggggg	ctgcaacgga	540
gatgggtcca	cctgccggct	ggtccgaggg	cagtataaat	cccagctctc	cgcaacccaa	600
tcggatgata	ctgtggttgc	aattccctat	ggaagtagac	atattcgcct	tgtcttaaaa	660
ggtcctgata	acttatactt	ggaaacccaa	accctccagg	ggactaaagg	tgaaaacagt	720
ctcagctcca	caggaaacttt	ccttgtggac	aattctagtg	tggacttcca	gaaatttcca	780
gacaaagaga	tactgagaat	ggctggacca	ctcacagcag	atttcattgt	caagattcgt	840
aactcgggct	ccgtcgacag	tacagtccag	ttcatcttct	atcaaccctc	catccaccga	900
tggagggaga	cggatttctt	tccttgcctc	gcaacctgtg	gaggagggtt	tcagctgaca	960
tcggctgagt	gctacgatct	gaggagcaac	cgtgtggttg	ctgaccaata	ctgtcactat	1020
taccagaga	acatcaaacc	caaaccctag	cttcaggagt	gcaacttgga	tccttgtcca	1080
gccagtgcag	gatacaagca	gatcatgctt	tatgacctct	accatcccct	tcctcgggtg	1140
gagggccacc	catggaccgc	gtgctcctcc	tcgtgtgggg	ggggcatcca	gagccgggca	1200
gtttcctgtg	tggaggagga	catccagggg	catgtcactt	cagtgggaag	gtggaaatgc	1260
atgtacaccc	ctaagatgcc	catcgcgcag	ccctgcaaca	tttttgactg	ccctaaatgg	1320
ctggcacagg	agtggctctc	gtgcacagtg	acatgtggcc	agggcctcag	ataccgtgtg	1380
gtcctctgca	tcgaccatcg	aggaatgcac	acaggaggct	gtagcccaaa	aacaaagccc	1440
cacataaaa	aggaatgcat	cgtacccact	ccctgctata	aacccaaaga	gaaacttcca	1500
gtcagaggcca	agttgccatg	gttcaaacaa	gctcaagagc	tagaagaagg	agctgctgtg	1560
tcagaggagc	cctcgttcat	cccagaggcc	tggtcggcct	gcacagtcac	ctgtggtgtg	1620
gggaccacag	tgcaaatagt	cagggtgccag	gtgctcctgt	ctttctctca	gtccgtggct	1680
gacctgccta	ttgacgagtg	tgaagggccc	aagccagcat	ccagcgtgc	ctgttatgca	1740
ggcccatgca	gcgggggaaat	tcttgagttc	aaccagacg	agacagatgg	gctctttggt	1800
ggctcgcagg	atttcgacga	gctgtatgac	tgggagtatg	aggggttcac	caagtgtctc	1860
gagtcctgtg	gaggaggtgt	ccaggaggct	gtggtgagct	gcttgaacaa	acagactcgg	1920
gagcctgctg	aggagaacct	gtgcgtgacc	agccgcgggc	ccccacagct	cctgaagtcc	1980

<210> 2
 <211> 1762
 <212> PRT
 <213> homo sapiens

<400> 2

Met	Glu	Cys	Cys	Arg	Arg	Ala	Thr	Pro	Gly	Thr	Leu	Leu	Leu	Phe	Leu
1				5					10					15	
Ala	Phe	Leu	Leu	Leu	Ser	Ser	Arg	Thr	Ala	Arg	Ser	Glu	Glu	Asp	Arg
		20						25					30		
Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu	Cys	Ser	Arg	Thr
	35						40					45			
Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys	Leu	Ser	Ser	Lys
	50					55					60				
Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys	Ser	Asn	Val	Asp
65					70					75					80
Cys	Pro	Pro	Glu	Ala	Gly	Asp	Phe	Arg	Ala	Gln	Gln	Cys	Ser	Ala	His
				85					90					95	
Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp	Leu	Pro	Val	Ser
			100					105					110		
Asn	Asp	Pro	Asp	Asn	Pro	Cys	Ser	Leu	Lys	Cys	Gln	Ala	Lys	Gly	Thr
	115						120					125			
Thr	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp	Gly	Thr	Arg	Cys
	130					135					140				
Tyr	Thr	Glu	Ser	Leu	Asp	Met	Cys	Ile	Ser	Gly	Leu	Cys	Gln	Ile	Val
145					150					155					160
Gly	Cys	Asp	His	Gln	Leu	Gly	Ser	Thr	Val	Lys	Glu	Asp	Asn	Cys	Gly
			165						170					175	
Val	Cys	Asn	Gly	Asp	Gly	Ser	Thr	Cys	Arg	Leu	Val	Arg	Gly	Gln	Tyr
		180						185					190		
Lys	Ser	Gln	Leu	Ser	Ala	Thr	Lys	Ser	Asp	Asp	Thr	Val	Val	Ala	Ile
	195						200					205			
Pro	Tyr	Gly	Ser	Arg	His	Ile	Arg	Leu	Val	Leu	Lys	Gly	Pro	Asp	His
	210					215					220				
Leu	Tyr	Leu	Glu	Thr	Lys	Thr	Leu	Gln	Gly	Thr	Lys	Gly	Glu	Asn	Ser
225					230					235					240
Leu	Ser	Ser	Thr	Gly	Thr	Phe	Leu	Val	Asp	Asn	Ser	Ser	Val	Asp	Phe
			245						250					255	
Gln	Lys	Phe	Pro	Asp	Lys	Glu	Ile	Leu	Arg	Met	Ala	Gly	Pro	Leu	Thr
		260						265					270		
Ala	Asp	Phe	Ile	Val	Lys	Ile	Arg	Asn	Ser	Gly	Ser	Ala	Asp	Ser	Thr
	275						280					285			
Val	Gln	Phe	Ile	Phe	Tyr	Gln	Pro	Ile	Ile	His	Arg	Trp	Arg	Glu	Thr
	290					295					300				
Asp	Phe	Phe	Pro	Cys	Ser	Ala	Thr	Cys	Gly	Gly	Gly	Tyr	Gln	Leu	Thr
305					310				315						320
Ser	Ala	Glu	Cys	Tyr	Asp	Leu	Arg	Ser	Asn	Arg	Val	Val	Ala	Asp	Gln
			325						330					335	
Tyr	Cys	His	Tyr	Tyr	Pro	Glu	Asn	Ile	Lys	Pro	Lys	Pro	Lys	Leu	Gln
		340					345					350			
Glu	Cys	Asn	Leu	Asp	Pro	Cys	Pro	Ala	Ser	Asp	Gly	Tyr	Lys	Gln	Ile
	355					360					365				
Met	Pro	Tyr	Asp	Leu	Tyr	His	Pro	Leu	Pro	Arg	Trp	Glu	Ala	Thr	Pro
	370					375					380				

Trp	Thr	Ala	Cys	Ser	Ser	Ser	Cys	Gly	Gly	Gly	Ile	Gln	Ser	Arg	Ala	
385						390				395					400	
Val	Ser	Cys	Val	Glu	Glu	Asp	Ile	Gln	Gly	His	Val	Thr	Ser	Val	Glu	
				405					410					415		
Glu	Trp	Lys	Cys	Met	Tyr	Thr	Pro	Lys	Met	Pro	Ile	Ala	Gln	Pro	Cys	
			420					425					430			
Asn	Ile	Phe	Asp	Cys	Pro	Lys	Trp	Leu	Ala	Gln	Glu	Trp	Ser	Pro	Cys	
		435					440					445				
Thr	Val	Thr	Cys	Gly	Gln	Gly	Leu	Arg	Tyr	Arg	Val	Val	Leu	Cys	Ile	
	450					455					460					
Asp	His	Arg	Gly	Met	His	Thr	Gly	Gly	Cys	Ser	Pro	Lys	Thr	Lys	Pro	
465					470				475						480	
His	Ile	Lys	Glu	Glu	Cys	Ile	Val	Pro	Thr	Pro	Cys	Tyr	Lys	Pro	Lys	
			485					490						495		
Glu	Lys	Leu	Pro	Val	Glu	Ala	Lys	Leu	Pro	Trp	Phe	Lys	Gln	Ala	Gln	
		500						505					510			
Glu	Leu	Glu	Gly	Ala	Ala	Val	Ser	Glu	Glu	Pro	Ser	Phe	Ile	Pro		
	515					520					525					
Glu	Ala	Trp	Ser	Ala	Cys	Thr	Val	Thr	Cys	Gly	Val	Gly	Thr	Gln	Val	
	530					535					540					
Arg	Ile	Val	Arg	Cys	Gln	Val	Leu	Leu	Ser	Phe	Ser	Gln	Ser	Val	Ala	
545					550					555					560	
Asp	Leu	Pro	Ile	Asp	Glu	Cys	Glu	Gly	Pro	Lys	Pro	Ala	Ser	Gln	Arg	
			565					570						575		
Ala	Cys	Tyr	Ala	Gly	Pro	Cys	Ser	Gly	Glu	Ile	Pro	Glu	Phe	Asn	Pro	
		580						585					590			
Asp	Glu	Thr	Asp	Gly	Leu	Phe	Gly	Gly	Leu	Gln	Asp	Phe	Asp	Glu	Leu	
	595					600					605					
Tyr	Asp	Trp	Glu	Tyr	Glu	Gly	Phe	Thr	Lys	Cys	Ser	Glu	Ser	Cys	Gly	
	610					615					620					
Gly	Gly	Val	Gln	Glu	Ala	Val	Val	Ser	Cys	Leu	Asn	Lys	Gln	Thr	Arg	
625					630					635					640	
Glu	Pro	Ala	Glu	Glu	Asn	Leu	Cys	Val	Thr	Ser	Arg	Arg	Pro	Pro	Gln	
			645						650				655			
Leu	Leu	Lys	Ser	Cys	Asn	Leu	Asp	Pro	Cys	Pro	Ala	Arg	Trp	Glu	Ile	
		660						665					670			
Gly	Lys	Trp	Ser	Pro	Cys	Ser	Leu	Thr	Cys	Gly	Val	Gly	Leu	Gln	Thr	
	675						680					685				
Arg	Asp	Val	Phe	Cys	Ser	His	Leu	Leu	Ser	Arg	Glu	Met	Asn	Glu	Thr	
	690					695					700					
Val	Ile	Leu	Ala	Asp	Glu	Leu	Cys	Arg	Gln	Pro	Lys	Pro	Ser	Thr	Val	
705					710					715					720	
Gln	Ala	Cys	Asn	Arg	Phe	Asn	Cys	Pro	Pro	Ala	Trp	Tyr	Pro	Ala	Gln	
			725						730					735		
Trp	Gln	Pro	Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Val	Gln	Lys	Arg	Glu	
		740						745					750			
Val	Leu	Cys	Lys	Gln	Arg	Met	Ala	Asp	Gly	Ser	Phe	Leu	Glu	Leu	Pro	
	755					760					765					
Glu	Thr	Phe	Cys	Ser	Ala	Ser	Lys	Pro	Ala	Cys	Gln	Gln	Ala	Cys	Lys	
	770					775					780					
Lys	Asp	Asp	Cys	Pro	Ser	Glu	Trp	Leu	Leu	Ser	Asp	Trp	Thr	Glu	Cys	
785					790					795					800	
Ser	Thr	Ser	Cys	Gly	Glu	Gly	Thr	Gln	Thr	Arg	Ser	Ala	Ile	Cys	Arg	
			805					810					815			
Lys	Met	Leu	Lys	Thr	Gly	Leu	Ser	Thr	Val	Val	Asn	Ser	Thr	Leu	Cys	
			820					825					830			

Pro	Pro	Leu	Pro	Phe	Ser	Ser	Ser	Ile	Arg	Pro	Cys	Met	Leu	Ala	Thr		
		835					840				845						
Cys	Ala	Arg	Pro	Gly	Arg	Pro	Ser	Thr	Lys	His	Ser	Pro	His	Ile	Ala		
	850					855				860							
Ala	Ala	Arg	Lys	Val	Tyr	Ile	Gln	Thr	Arg	Arg	Gln	Arg	Lys	Leu	His		
865					870					875					880		
Phe	Val	Val	Gly	Gly	Phe	Ala	Tyr	Leu	Leu	Pro	Lys	Thr	Ala	Val	Val		
			885						890					895			
Leu	Arg	Cys	Pro	Ala	Arg	Arg	Val	Arg	Lys	Pro	Leu	Ile	Thr	Trp	Glu		
		900						905					910				
Lys	Asp	Gly	Gln	His	Leu	Ile	Ser	Ser	Thr	His	Val	Thr	Val	Ala	Pro		
	915						920					925					
Phe	Gly	Tyr	Leu	Lys	Ile	His	Arg	Leu	Lys	Pro	Ser	Asp	Ala	Gly	Val		
	930					935				940							
Tyr	Thr	Cys	Ser	Ala	Gly	Pro	Ala	Arg	Glu	His	Phe	Val	Ile	Lys	Leu		
945					950					955					960		
Ile	Gly	Gly	Asn	Arg	Lys	Leu	Val	Ala	Arg	Pro	Leu	Ser	Pro	Arg	Ser		
			965						970					975			
Glu	Glu	Glu	Val	Leu	Ala	Gly	Arg	Lys	Gly	Gly	Pro	Lys	Glu	Ala	Leu		
			980					985					990				
Gln	Thr	His	Lys	His	Gln	Asn	Gly	Ile	Phe	Ser	Asn	Gly	Ser	Lys	Ala		
	995						1000					1005					
Glu	Lys	Arg	Gly	Leu	Ala	Ala	Asn	Pro	Gly	Ser	Arg	Tyr	Asp	Asp	Leu		
	1010					1015					1020						
Val	Ser	Arg	Leu	Leu	Glu	Gln	Gly	Gly	Trp	Pro	Gly	Glu	Leu	Leu	Ala		
1025					1030					1035					1040		
Ser	Trp	Glu	Ala	Gln	Asp	Ser	Ala	Glu	Arg	Asn	Thr	Thr	Ser	Glu	Glu		
			1045					1050						1055			
Asp	Pro	Gly	Ala	Glu	Gln	Val	Leu	Leu	His	Leu	Pro	Phe	Thr	Met	Val		
	1060						1065						1070				
Thr	Glu	Gln	Arg	Arg	Leu	Asp	Asp	Ile	Leu	Gly	Asn	Leu	Ser	Gln	Gln		
	1075					1080						1085					
Pro	Glu	Glu	Leu	Arg	Asp	Leu	Tyr	Ser	Lys	His	Leu	Val	Ala	Gln	Leu		
	1090					1095					1100						
Ala	Gln	Glu	Ile	Phe	Arg	Ser	His	Leu	Glu	His	Gln	Asp	Thr	Leu	Leu		
1105					1110					1115					1120		
Lys	Pro	Ser	Glu	Arg	Arg	Thr	Ser	Pro	Val	Thr	Leu	Ser	Pro	His	Lys		
			1125					1130						1135			
His	Val	Ser	Gly	Phe	Ser	Ser	Ser	Leu	Arg	Thr	Ser	Ser	Thr	Gly	Asp		
	1140							1145					1150				
Ala	Gly	Gly	Gly	Ser	Arg	Arg	Pro	His	Arg	Lys	Pro	Thr	Ile	Leu	Arg		
	1155						1160					1165					
Lys	Ile	Ser	Ala	Ala	Gln	Gln	Leu	Ser	Ala	Ser	Glu	Val	Val	Thr	His		
	1170					1175					1180						
Leu	Gly	Gln	Thr	Val	Ala	Leu	Ala	Ser	Gly	Thr	Leu	Ser	Val	Leu	Leu		
1185					1190					1195					1200		
His	Cys	Glu	Ala	Ile	Gly	His	Pro	Arg	Pro	Thr	Ile	Ser	Trp	Ala	Arg		
			1205						1210					1215			
Asn	Gly	Glu	Glu	Val	Gln	Phe	Ser	Asp	Arg	Ile	Leu	Leu	Gln	Pro	Asp		
		1220						1225					1230				
Asp	Ser	Leu	Gln	Ile	Leu	Ala	Pro	Val	Glu	Ala	Asp	Val	Gly	Phe	Tyr		
	1235						1240					1245					
Thr	Cys	Asn	Ala	Thr	Asn	Ala	Leu	Gly	Tyr	Asp	Ser	Val	Ser	Ile	Ala		
	1250					1255				1260							
Val	Thr	Leu	Ala	Gly	Lys	Pro	Leu	Val	Lys	Thr	Ser	Arg	Met	Thr	Val		
1265					1270					1275					1280		

Ile	Asn	Thr	Glu	Lys	Pro	Ala	Val	Thr	Val	Asp	Ile	Gly	Ser	Thr	Ile	1285	1290	1295	
Lys	Thr	Val	Gln	Gly	Val	Asn	Val	Thr	Ile	Asn	Cys	Gln	Val	Ala	Gly	1300	1305	1310	
Val	Pro	Glu	Ala	Glu	Val	Thr	Trp	Phe	Arg	Asn	Lys	Ser	Lys	Leu	Gly	1315	1320	1325	
Ser	Pro	His	His	Leu	His	Glu	Gly	Ser	Leu	Leu	Leu	Thr	Asn	Val	Ser	1330	1335	1340	
Ser	Ser	Asp	Gln	Gly	Leu	Tyr	Ser	Cys	Arg	Ala	Ala	Asn	Leu	His	Gly	1345	1350	1355	1360
Glu	Leu	Thr	Glu	Ser	Thr	Gln	Leu	Leu	Ile	Leu	Asp	Pro	Pro	Gln	Val	1365	1370	1375	
Pro	Thr	Gln	Leu	Glu	Asp	Ile	Arg	Ala	Leu	Leu	Ala	Ala	Thr	Gly	Pro	1380	1385	1390	
Asn	Leu	Pro	Ser	Val	Leu	Thr	Ser	Pro	Leu	Gly	Thr	Gln	Leu	Val	Leu	1395	1400	1405	
Asp	Pro	Gly	Asn	Ser	Ala	Leu	Leu	Gly	Cys	Pro	Ile	Lys	Gly	His	Pro	1410	1415	1420	
Val	Pro	Asn	Ile	Thr	Trp	Phe	His	Gly	Gly	Gln	Pro	Ile	Val	Thr	Ala	1425	1430	1435	1440
Thr	Gly	Leu	Thr	His	His	Ile	Leu	Ala	Ala	Gly	Gln	Ile	Leu	Gln	Val	1445	1450	1455	
Ala	Asn	Leu	Ser	Gly	Gly	Ser	Gln	Gly	Glu	Phe	Ser	Cys	Leu	Ala	Gln	1460	1465	1470	
Asn	Glu	Ala	Gly	Val	Leu	Met	Gln	Lys	Ala	Ser	Leu	Val	Ile	Gln	Asp	1475	1480	1485	
Tyr	Trp	Trp	Ser	Val	Asp	Arg	Leu	Ala	Thr	Cys	Ser	Ala	Ser	Cys	Gly	1490	1495	1500	
Asn	Arg	Gly	Val	Gln	Gln	Pro	Arg	Leu	Arg	Cys	Leu	Leu	Asn	Ser	Thr	1505	1510	1515	1520
Glu	Val	Asn	Pro	Ala	His	Cys	Ala	Gly	Lys	Val	Arg	Pro	Ala	Val	Gln	1525	1530	1535	
Pro	Ile	Ala	Cys	Asn	Arg	Arg	Asp	Cys	Pro	Ser	Arg	Trp	Met	Val	Thr	1540	1545	1550	
Ser	Trp	Ser	Ala	Cys	Thr	Arg	Ser	Cys	Gly	Gly	Gly	Val	Gln	Thr	Arg	1555	1560	1565	
Arg	Val	Thr	Cys	Gln	Lys	Leu	Lys	Ala	Ser	Gly	Ile	Ser	Thr	Pro	Val	1570	1575	1580	
Ser	Asn	Asp	Met	Cys	Thr	Gln	Val	Ala	Lys	Arg	Pro	Val	Asp	Thr	Gln	1585	1590	1595	1600
Ala	Cys	Asn	Gln	Gln	Leu	Cys	Val	Glu	Trp	Ala	Phe	Ser	Ser	Trp	Gly	1605	1610	1615	
Gln	Cys	Asn	Gly	Pro	Cys	Ile	Gly	Pro	His	Leu	Ala	Val	Gln	His	Arg	1620	1625	1630	
Gln	Val	Phe	Cys	Gln	Thr	Arg	Asp	Gly	Ile	Thr	Leu	Pro	Ser	Glu	Gln	1635	1640	1645	
Cys	Ser	Ala	Leu	Pro	Arg	Pro	Val	Ser	Thr	Gln	Asn	Cys	Trp	Ser	Glu	1650	1655	1660	
Ala	Cys	Ser	Val	His	Trp	Arg	Val	Ser	Leu	Trp	Thr	Leu	Cys	Thr	Ala	1665	1670	1675	1680
Thr	Cys	Gly	Asn	Tyr	Gly	Phe	Gln	Ser	Arg	Arg	Val	Glu	Cys	Val	His	1685	1690	1695	
Ala	Arg	Thr	Asn	Lys	Ala	Val	Pro	Glu	His	Leu	Cys	Ser	Trp	Gly	Pro	1700	1705	1710	
Arg	Pro	Ala	Asn	Trp	Gln	Arg	Cys	Asn	Ile	Thr	Pro	Cys	Glu	Asn	Met	1715	1720	1725	

Glu	Cys	Arg	Asp	Thr	Thr	Arg	Tyr	Cys	Glu	Lys	Val	Lys	Gln	Leu	Lys
1730						1735					1740				
Leu	Cys	Gln	Leu	Ser	Gln	Phe	Lys	Ser	Arg	Cys	Cys	Gly	Thr	Cys	Gly
1745					1750					1755					1760
Lys	Ala														

1730
 1735
 1740
 1745
 1750
 1755
 1760